

6.5

The Coordinate Plane

NAME _____

Date _____ Period _____

Plot the ordered pair in the coordinate plane. Describe the location of the point. (Which quadrant and/or axis is the point located in or on?)

1. $A(8, 4)$

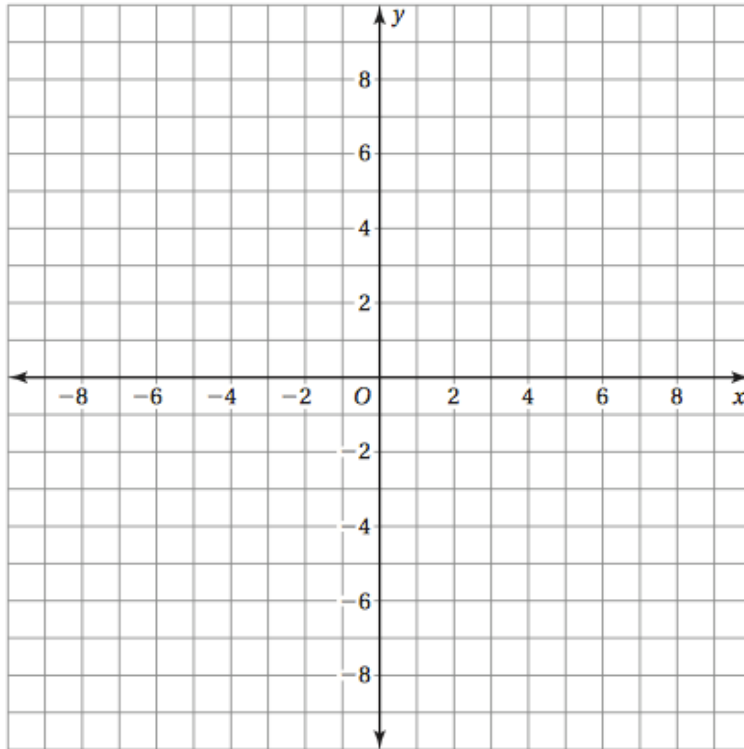
2. $B(-3, 5)$

3. $C(-2, -2)$

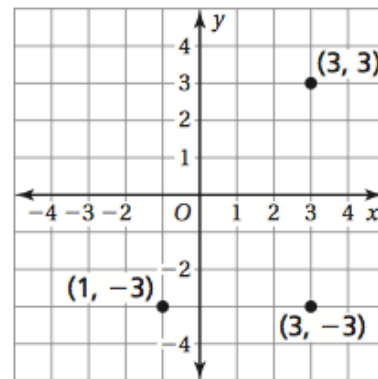
4. $D(4, -7)$

5. $E(-6, -5)$

6. $F(-9, 7)$



7. The coordinates of three vertices of a rectangle are shown in the figure. What are the coordinates of the fourth vertex?

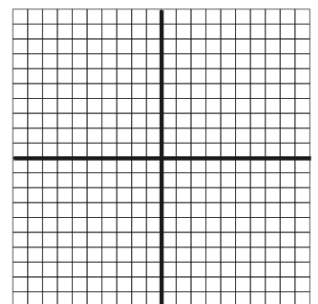


8. Your house is located at $(-4, 3)$, which is 4 blocks west and 3 blocks north of the center of town. To get from your house to the mall, you walk 7 blocks east and 4 blocks south.



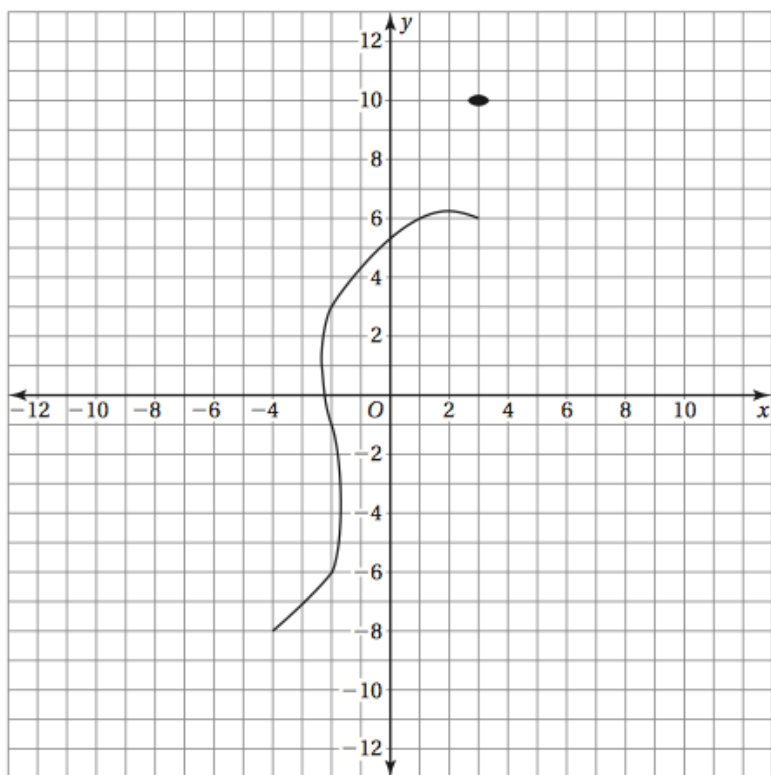
a. What ordered pair corresponds to the location of the mall?

b. Is your house or the mall closer to the center of town? Explain.

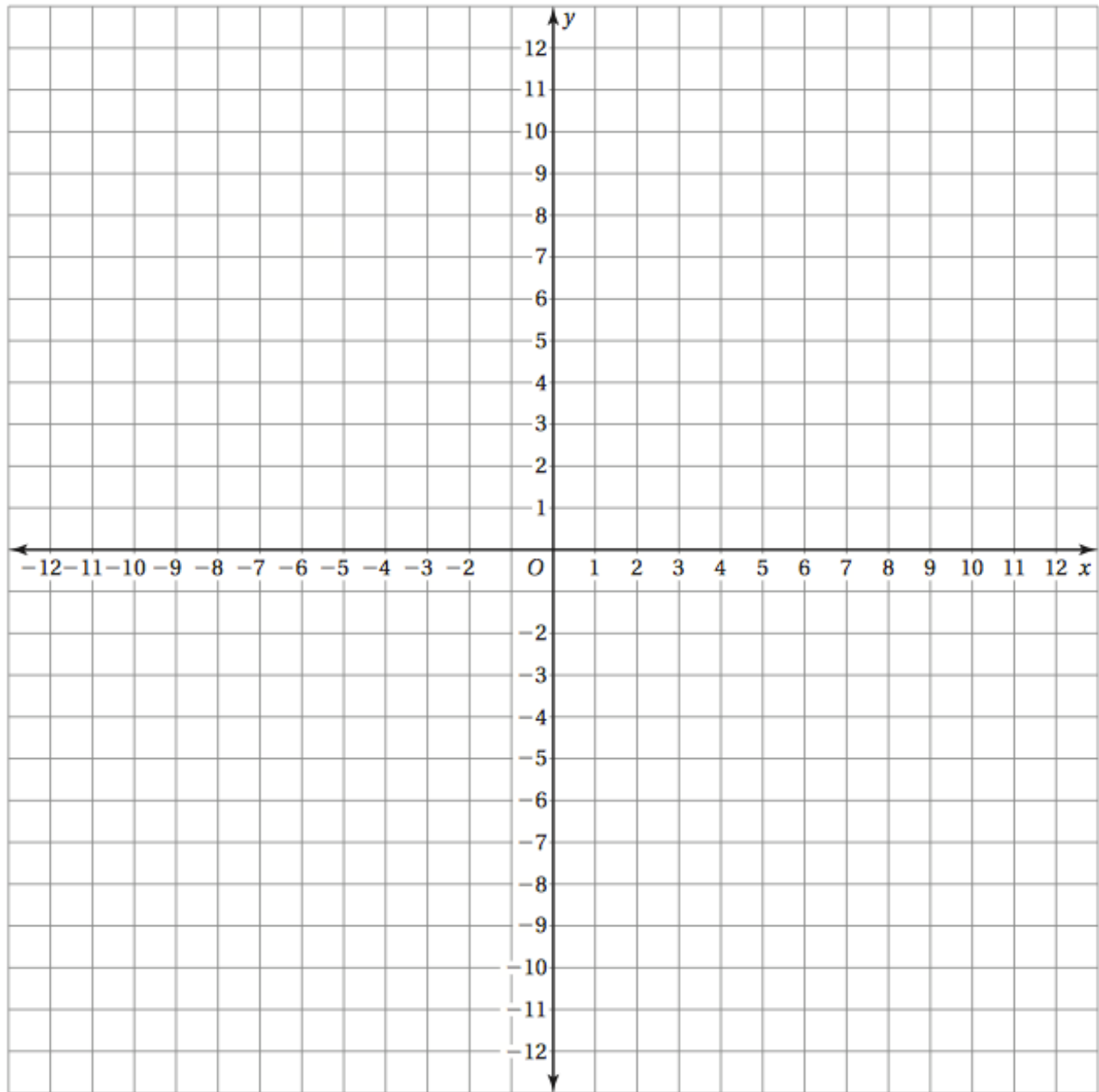


**Work with a partner. Plot and connect the points to make a picture.
Describe and color the picture when you are done.**

- | | | | | |
|-------------|-------------|-------------|------------|-------------|
| 1(6, 9) | 2(4, 11) | 3(2, 12) | 4(0, 11) | 5(-2, 9) |
| 6(-6, 2) | 7(-9, 1) | 8(-11, -3) | 9(-7, 0) | 10(-5, -1) |
| 11(-5, -5) | 12(-4, -8) | 13(-6, -10) | 14(-3, -9) | 15(-3, -10) |
| 16(-4, -11) | 17(-4, -12) | | | |
| 18(-3, -11) | 19(-2, -12) | | | |
| 20(-2, -11) | 21(-1, -12) | | | |
| 22(-1, -11) | 23(-2, -10) | | | |
| 24(-2, -9) | 25(1, -9) | | | |
| 26(2, -8) | 27(2, -10) | | | |
| 28(1, -11) | 29(1, -12) | | | |
| 30(2, -11) | 31(3, -12) | | | |
| 32(3, -11) | 33(4, -12) | | | |
| 34(4, -11) | 35(3, -10) | | | |
| 36(3, -8) | 37(4, -6) | | | |
| 38(6, 0) | 39(9, -3) | | | |
| 40(9, -1) | 41(8, 1) | | | |
| 42(5, 3) | 43(3, 6) | | | |
| 44(3, 7) | 45(4, 8) | | | |



Make up your own “dot-to-dot” picture. Use at least 20 points. Your picture should have at least two points in each quadrant.



List your points, in order, to create your dot-to-dot.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.